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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,605	11/09/2005	Alessandro Piana	3687-131	6322
23117 7590 11/23/2009 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
IRVIN, THOMAS W				
ART UNIT		PAPER NUMBER		
3657				
MAIL DATE		DELIVERY MODE		
11/23/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/552,605

**Applicant(s)**

PIANA ET AL.

**Examiner**

THOMAS W. IRVIN

**Art Unit**

3657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 August 2009.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 05 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/GS/US)  
Paper No(s)/Mail Date 20090806  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the internal fluid delivering provided in the tool must be shown or the feature(s) canceled from the claim(s). Figure 1 shows the fluid delivery duct (11) being internal to the machine (1) or support element (10), and not the tool (2). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 4, 8, 11, 12, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3, 4, 11, and 12 recites the limitation "the jet" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claims 8 and 16 recite that a fluid communication duct is provided internally in the tool. With reference to fig. 1, the fluid delivery duct (11) appears to be internal to the machine (1) or support element (10), and not the tool (2).

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-10, and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by McConkey (5,494,134).

In Re claims 1 and 9, McConkey discloses a device for delivering a lubricating and/or cooling fluid near the contact area between a tool and a workpiece being

machined (see fig. 5), comprising at least a circuit (30) for circulation of said fluid and delivering means to deliver said fluid near, or in correspondence of, the contact area between said tool and said workpiece, characterized in that said delivering means include one or more nozzles (36).

In Re claims 2 and 10, the nozzle has a delivering orifice having a diameter between 0.10 mm and 0.80 mm (see col. 3, lines 50-51).

In Re claims 4 and 12, the nozzle has a spray angle of the jet between 10 and 80 degrees (see col. 3, line 56).

In Re claims 5, 6, 13, and 14, see col. 4, lines 63-64. Additionally, claim elements "means to supply" is a means plus function limitation that is understood to invoke 35 U.S.C. 112, sixth paragraph. McConkey discloses conduits (see figs. 1 and 6).

In Re claims 7 and 15, see fig. 5.

In Re claims 8 and 16, see fig. 1.

Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Patrick (6,203,857).

In Re claims 1, 9, and 17, Patrick discloses a device for delivering a lubricating and/or cooling fluid near the contact area between a tool and a workpiece (24), comprising at least a circuit (see fig. 1) for circulation of said fluid and delivering means to deliver said fluid near, or in correspondence of, the contact area between said tool

and said workpiece, characterized in that said delivering means include one or more nozzles (33) configured to atomize the fluid (see example 1).

In Re claims 2, 3, 10, and 11, the nozzle has a delivering orifice having a diameter between 0.10 mm and 0.80 mm and spays a fan shaped jet (see col. 7, lines 45-50).

In Re claims 4 and 12, the nozzle has a spray angle of the jet between 10 and 80 degrees (see col. 7, lines 45-50).

In Re claims 5, 6, 13, and 14, see col. 4, lines 63-64. Additionally, claim elements "means to supply" is a means plus function limitation that is understood to invoke 35 U.S.C. 112, sixth paragraph. Patrick discloses conduits (34). Additionally, Patrick discloses pressures between 5 and 70 bar (see col. 7, line 39).

In Re claims 7 and 15, see figs. 4 and 5.

In Re claims 8 and 16, the anchor block (46c) is understood to be part of the machine.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McConkey (5,494,134) as applied to claims 1 and 9 above, and further in view of Raghavan et al. (5,417,607).

McConkey fails to teach a fan shaped spray pattern.

Raghavan et al. teach a nozzle spraying a fan shaped spray of fluid. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the nozzle of McConkey to have a fan shaped spray, as taught by Raghavan et al., to allow the fluid to be sprayed across the tool and workpiece surfaces to selectively remove a layer of material from the surface evenly and completely, without damaging the tool or workpiece, and to also ensure an even or complete coating of the tool and workpiece.

### ***Response to Arguments***

In response to applicant's argument that McConkey fail to disclose the nozzle being used to atomize the fluid, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teaching is found in the knowledge generally available to one of ordinary skill in the art to recognize that a fan-shaped spray, as taught by Gaghaven et al., would ensure an even or complete coating of lubricant to the tool and workpiece.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS W. IRVIN whose telephone number is (571)270-3095. The examiner can normally be reached on Mon-Fri 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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/Thomas W. Irvin/  
Examiner, Art Unit 3657

/Bradley T King/  
Primary Examiner, Art Unit 3657